

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Claims 18-19 are canceled without prejudice or disclaimer.

Claims 1-17 are amended.

Listing of Claims:

1. (Currently Amended) A method for controlling a continuous metal removal in conjunction with a zinc preparation process, in which the metal removal is performed in one or more reactors, in conjunction with the reactor, the redox potential and the acidity and/or basicity are measured, and the process variables of the metal removal are adjusted towards the desired direction based on the measurement results, ~~characterised in that~~ wherein the measurements of the redox potential are performed from the sludge produced in the reactor outside the reactor vessel, and the acidity and/or basicity of the reactor solution is determined by means of the BT value, and the measuring instrument of the redox potential is purified at predetermined intervals.

2. (Currently Amended) The method as defined in claim 1, ~~characterised in that~~ wherein the solid matter content of the reactor solution is determined and adjusted to be suitable.

3. (Currently Amended) The method as defined in claim 1 ~~or 2, characterised in that~~ wherein based on the measurement results, the introduction of zinc powder into the metal removal reactor is adjusted.

4. (Currently Amended) The method as defined in ~~any one of claims 1-3, characterised in that~~ claim 1, wherein based on the measurement results, the redox potential of the sludge, the acidity/basicity of the solution, the solid matter content of the solution and/or the temperature of the reactor are adjusted.

5. (Currently Amended) The method as defined in ~~any one of claims 1-4, characterised in that~~ claim 1, wherein the metal removal is performed at least in two reactors connected in serial.

6. (Currently Amended) The method as defined in ~~any one of claims 1-5, characterised in that~~ claim 1, wherein the measuring instrument of the redox potential is arranged in conjunction with the outlet pipe of the reactor or in conjunction with the connecting pipe between the reactors.

7. (Currently Amended) The method as defined in ~~any one of claims 1-6~~, characterised ~~in that~~ claim 1, wherein the measuring instrument of acidity and/or basicity is arranged in conjunction with the reactor vessel.

8. (Currently Amended) The method as defined in ~~any one of claims 1-7~~, characterised ~~in that~~ claim 1, wherein the measurement of the redox potential is performed using a measurement electrode.

9. (Currently Amended) The method as defined in ~~any one of claims 1-8~~, characterised ~~in that~~ claim 1, wherein the metal removal is cobalt removal.

10. (Currently Amended) The method as defined in ~~any one of claims 1-9~~, characterised ~~in that~~ claim 1, wherein the measuring instrument is regularly washed, preferably at intervals of 1-2 hours.

11. (Currently Amended) The method as defined in ~~any one of claims 1-10~~, characterised ~~in that~~ claim 1, wherein in conjunction with each reactor, measurements are performed that control the adjustment of the desired process variable, for each reactor specifically.

12. (Currently Amended) An apparatus for controlling a continuous metal removal in conjunction with a zinc preparation process, in which the metal removal is performed in one or more reactors (~~11a-e~~), the apparatus comprising at least one measuring instrument (~~16a-e~~) for measuring the redox potential and acidity and/or basicity in conjunction with the reactor, at least one adjustment device (~~17a-e~~) for adjusting the process variables of the metal removal towards the desired direction based on the measurement results, and at least one control device for forwarding the measurement results from the measuring instrument (~~16a-e~~) to the adjustment device (~~17a-e~~), characterised ~~in that~~ wherein the measuring instrument of the redox potential (~~16a-e~~) is arranged outside the reactor vessel, and is placed in conjunction with the pipe connected to the reactor, via which pipe the sludge produced in the reactor flows out, and apparatus comprises a determination device of BT value for determining the acidity and/or basicity of the reactor solution, and the apparatus comprises purification means for purifying the measuring instrument of the redox potential at predetermined intervals.

13. (Currently Amended) The apparatus as defined in claim 12, ~~characterised in that~~ wherein the apparatus comprises a feeding device (~~17a-e~~) for introducing zinc powder into the metal removal reactor (~~11a-e~~), and the feeding device is connected to the adjustment and/or control device.

14. (Currently Amended) The apparatus as defined in claim 12 ~~or 13, characterised in that~~ wherein the measuring instrument ~~(16a-e)~~ of the redox potential is arranged in conjunction with the connecting pipe between the reactors.

15. (Currently Amended) The apparatus as defined in ~~any one of claims 12-14, characterised in that~~ claim 12, wherein the measuring instrument of acidity and/or basicity is arranged in conjunction with the reactor vessel.

16. (Currently Amended) The apparatus as defined in ~~any one of claims 12-15, characterised in that~~ claim 12, wherein the measuring instrument ~~(16a-e)~~ of the redox potential comprises at least one measurement electrode.

17. (Currently Amended) The use of an apparatus as defined in ~~any one of claims 12-16~~ claim 12 in a cobalt removing process.